

What is claimed is:

1. A driver circuit for driving an electro-optical device which has:

first to i th scan lines (i is an integer of two or more);

5 first to i th color component signal lines;

first to i th switching elements, each of which is connected to a j th scan line ($1 \leq j \leq i$, j is an integer) and a j th color component signal line and is controlled by a j th select signal supplied to the j th scan line;

10 first to i th pixel electrodes, each of which is connected to a j th switching element; and

first to i th demultiplex switching elements, each of which is connected to the j th color component signal line at one end and to a signal line at the other end, and is controlled by a j th demultiplex control signal, multiplexed first to i th color component signals being output to the signal line,

15 the driver circuit comprising a select signal generation circuit which generates first to i th select signals, the first to i th select signals controlling the first to i th switching elements based on first to i th demultiplex control signals respectively,

wherein the select signal generation circuit generates the j th select signal so that at least the j th switching element is in an ON state when a j th demultiplex switching
20 element shifts from an ON state to an OFF state and that the j th switching element is set to an OFF state before the j th demultiplex switching element is set to the ON state again after the j th demultiplex switching element has shifted to the OFF state.

2. The driver circuit as defined in claim 1,

25 wherein the select signal generation circuit includes first to i th flip-flops, each of which outputs the j th select signal, and

wherein, in a case where the first to i th demultiplex control signals cyclically go

active in order from the first to i th demultiplex control signals, a j th flip-flop outputs the j th select signal which is set by the j th demultiplex control signal and reset by one of the first to i th demultiplex control signals other than the j th demultiplex control signal.

5 3. The driver circuit as defined in claim 2,

wherein the first flip-flop outputs the first select signal which is set by the first demultiplex control signal and reset by the i th demultiplex control signal, and

wherein a k th flip-flop ($2 \leq k \leq i$, k is an integer) outputs a k th select signal which is set by a k th demultiplex control signal and reset by a $(k-1)$ th demultiplex control signal.

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4. The driver circuit as defined in claim 2,

wherein the j th flip-flop outputs the j th select signal which is set only in a select period of a pixel formed of first to i th color components corresponding to the first to i th color component signal lines.

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5. An electro-optical device comprising:

first to i th scan lines (i is an integer of two or more);

first to i th color component signal lines;

first to i th switching elements, each of which is connected to a j th scan line ($1 \leq j \leq i$, j is an integer) and a j th color component signal line and is controlled by a j th select signal supplied to the j th scan line;

first to i th pixel electrodes, each of which is connected to a j th switching element; and

first to i th demultiplex switching elements, each of which is connected to the j th color component signal line at one end and to a signal line at the other end, and is controlled by a j th demultiplex control signal, multiplexed first to i th color component

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signals being output to the signal line,

wherein the j th switching element is set to an ON state based on the j th select signal when a j th demultiplex switching element shifts from an ON state to an OFF state, and set to an OFF state based on the j th select signal before the j th demultiplex switching element is set to the ON state again after the j th demultiplex switching element has shifted to the OFF state.

6. An electro-optical device comprising:

first to i th scan lines (i is an integer of two or more);

10 first to i th color component signal lines;

first to i th switching elements, each of which is connected to a j th scan line ($1 \leq j \leq i$, j is an integer) and a j th color component signal line and is controlled by a j th select signal supplied to the j th scan line;

15 first to i th pixel electrodes, each of which is connected to a j th switching element;

first to i th demultiplex switching elements, each of which is connected to the j th color component signal line at one end and to a signal line at the other end, and is controlled by a j th demultiplex control signal, multiplexed first to i th color component signals being output to the signal line; and

20 a select signal generation circuit which generates first to i th select signals, the first to i th select signals controlling the first to i th switching elements based on first to i th demultiplex control signals respectively,

wherein the select signal generation circuit generates the j th select signal so that at least the j th switching element is in an ON state when a j th demultiplex switching element shifts from an ON state to an OFF state and that the j th switching element is set to an OFF state before the j th demultiplex switching element is set to the ON state again after the j th demultiplex switching element has shifted to the OFF state.

7. The electro-optical device as defined in claim 6,

wherein the select signal generation circuit includes first to i th flip-flops, each of which outputs the j th select signal, and

5 wherein, in a case where the first to i th demultiplex control signals cyclically go active in order from the first to i th demultiplex control signals, a j th flip-flop outputs the j th select signal which is set by the j th demultiplex control signal and reset by one of the first to i th demultiplex control signals other than the j th demultiplex control signal.

10 8. The electro-optical device as defined in claim 7,

wherein the first flip-flop outputs the first select signal which is set by the first demultiplex control signal and reset by the i th demultiplex control signal, and

wherein a k th flip-flop ($2 \leq k \leq i$, k is an integer) outputs a k th select signal which is set by a k th demultiplex control signal and reset by a $(k-1)$ th demultiplex control signal.
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9. The electro-optical device as defined in claim 7,

wherein the j th flip-flop outputs the j th select signal which is set only in a select period of a pixel formed of first to i th color components corresponding to the first to i th color component signal lines.
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10. A method of driving an electro-optical device which has:

first to i th scan lines (i is an integer of two or more);

first to i th color component signal lines;

25 first to i th switching elements, each of which is connected to a j th scan line ($1 \leq j \leq i$, j is an integer) and a j th color component signal line and is controlled by a j th select signal supplied to the j th scan line;

first to i th pixel electrodes, each of which is connected to a j th switching element; and

first to i th demultiplex switching elements, each of which is connected to the j th color component signal line at one end and to a signal line at the other end, and is
5 controlled by a j th demultiplex control signal, multiplexed first to i th color component signals being output to the signal line,

the method comprising setting at least the j th switching element to an ON state based on the j th select signal when a j th demultiplex switching element shifts from an ON state to an OFF state, and setting the j th switching element to an OFF state based on
10 the j th select signal before the j th demultiplex switching element is set to the ON state again after the j th demultiplex switching element has shifted to the OFF state.

11. The method as defined in claim 10,

wherein, in a case where first to i th demultiplex control signals cyclically go
15 active in order from the first to i th demultiplex control signals, the j th select signal is set by the j th demultiplex control signal and reset by one of the first to i th demultiplex control signals other than the j th demultiplex control signal.

12. The method as defined in claim 11,

20 wherein a first select signal is set by the first demultiplex control signal and reset by the i th demultiplex control signal, and a k th select signal ($2 \leq k \leq i$, k is an integer) is set by a k th demultiplex control signal and reset by a $(k-1)$ th demultiplex control signal.

13. The driving method as defined in claim 11,

25 wherein the j th select signal is set only in a select period of a pixel formed of first to i th color components corresponding to the first to i th color component signal lines.